-continued

5)
(SEQ ID NO: 15)
GSIESINRM,
(SEQ ID NO: 16)
ISKGGST,
and
(SEQ ID NO: 17)
AAGPVWEQF,
respectively; or

6)
(SEQ ID NO: 18)
GRTISLYAV,
(SEQ ID NO: 19)
ISWTDSST,
and
(SEQ ID NO: 20)
AADVSIRGLQKYEYDY,
respectively; or

7)
(SEQ ID NO: 21)
TRTFSSYIM,
(SEQ ID NO: 22)
ISWSGRMT,
and
(SEQ ID NO: 23)
AADRTTAWGAPRSQYDS,
respectively.

[0009] The antigen-binding fragment may be a single-domain antibody (sdAb).

[0010] The antibody may be an IgA, IgD, IgE, IgG, or IgM.

[0011] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GFLLRSNTM (SEQ ID NO:1), IRPSGLT (SEQ ID NO:2), and HTRPPFQRDS (SEQ ID NO:3) or ATRPPFQRDS (SEQ ID NO:4), respectively.

[0012] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GRTFIAYAM (SEQ ID NO:5), ITNFAGGTT (SEQ ID NO:6), and AADRSAQTMRQVRPVLPY (SEQ ID NO:7), respectively.

[0013] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GRTFDNYVM (SEQ ID NO:8), ISGSGSIT (SEQ ID NO:9), and AAGSRRTYYREPKFYPS (SEQ ID NO:10), respectively.

[0014] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GSTFSSSSV (SEQ ID NO:11), ITSGGST (SEQ ID NO:12), and NVAGRNWVPISRYSPGPY (SEQ ID NO:13) or AVAGRNWVPISRYSPGPY (SEQ ID NO:14), respectively.

[0015] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GSIESINRM (SEQ ID NO:15), ISKGGST (SEQ ID NO:16), and AAGPVWEQF (SEQ ID NO:17), respectively.

[0016] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising GRTISLYAV (SEQ ID NO:18), ISWTDSST (SEQ ID NO:19), and AADVSIRGLQKYEYDY (SEQ ID NO:20), respectively.

[0017] The CDR1, CDR2 and CDR3 may comprise an amino acid sequence comprising TRTFSSYIM (SEQ ID NO:21), ISWSGRMT (SEQ ID NO:22), and AADRTTAWGAPRSQYDS (SEQ ID NO:23), respectively.

[0018] The antibody or an antigen-binding fragment may be humanized or partially humanized.

[0019] According to another embodiment, there is provided a compound comprising an antibody or an antigen-binding fragment according to the present invention.

[0020] The antibody or an antigen-binding fragment may be linked to the compound via a linker.

[0021] The linker may be an amino acid sequence that allows for the functional linking of the compound to the antibody or an antigen-binding fragment.

[0022] The amino acid sequence may comprise about 3 to about 40 amino acids.

[0023] The linker sequence may be $(GGGGS)_n$, wherein $n \geq 1$, or any suitable linker.

[0024] The antibody or an antigen-binding fragment may be fused to an antibody or an antigen-binding fragment, operable to bind a target epitope.

[0025] The antibody or an antigen-binding fragment may be linked to a peptide, a polypeptide, a protein, an enzyme, an antibody, an antibody fragment, or combinations thereof, wherein each of the antibody or an antigen-binding fragment and the linked peptide, polypeptide, protein, enzyme, antibody, antibody fragment, or combinations thereof are functional.

[0026] According to another embodiment, there is provided a composition comprising the compound of the present invention, and a pharmaceutically acceptable diluent, carrier or excipient.

[0027] According to another embodiment, there is provided a nucleic acid vector comprising a nucleotide sequence encoding a compound of the present invention.

[0028] According to another embodiment, there is provided a cell comprising the nucleic acid vector of the present invention for expressing the compound of the present invention.

[0029] According to another embodiment, there is provided a cell for expressing the compound of the present invention.

[0030] According to another embodiment, there is provided a method of removing a molecule from serum, comprising administering a compound according to the present invention specific to the molecule, wherein the antibody or an antigen-binding fragment comprises CDR1, CDR2 and CDR3 comprising an amino acid sequence comprising GRTFDNYVM (SEQ ID NO:8), ISGSGSIT (SEQ ID NO:9), and AAGSRRTYYREPKFYPS (SEQ ID NO:10), respectively.

[0031] According to another embodiment, there is provided a use of a compound according to the present invention specific to a molecule for removing the molecule from serum, wherein the sdAb comprises CDR1, CDR2 and CDR3 comprising an amino acid sequence comprising GRTFDNYVM (SEQ ID NO:8), ISGSGSIT (SEQ ID NO:9), and AAGSRRTYYREPKFYPS (SEQ ID NO:10), respectively.

[0032] According to another embodiment, there is provided a solid support for purification of albumin, derivatives thereof, or fragments thereof comprising a solid or semi-solid medium linked to an antibody or an antigen-binding fragment according to the present invention or a compound according to the present invention.